

Table 1.

Reserves, and hypothetical annual production, projected mine life, and extended regional mill life for satellite prospects, as well as approximate remaining Fort Knox tailings impoundment capacity.

Proven and Probable Reserves	Hypothetical Reserves	Tonnage (MM tons)	Hypothetical Tons per Year (MM tons)	Projected Project Life (Years)	Extended Regional Mill Life (Years)	Approx. Remaining Capacity ⁶ (MM tons)
N Ph I		7.2	3.5	2.0	0.5	34
	TN Ph 2 & 3 ¹	8.9	3.5	2.5	0.6	25
yan Lode		2.4	0.9	2.7	0.2	22
	Ryan Lode ²	1.9	0.9	2.1	0.1	20
	Gil ³	7.1	3.5	2.0	0.5	13
	West Ridge/ Steamboat ⁴	5.0	3.5	1.4	0.3	8
	Amanita ⁵	7.5	3.5	2.1	0.5	1
Total		40.0			2.7	

¹ Based on announced possible and resource

² Based on announced possible and resource

³ Based on a hypothetical 300,000 ounce deposit, 0.042 opt and 10,000 tpd

⁴ Based on a hypothetical 300,000 ounce deposit, 0.06 opt and 10,000 tpd

⁵ Based on a hypothetical 300,000 ounce deposit, 0.04 opt and 10,000 tpd

⁶ Remaining capacity after subtracting Fort Knox current proven and probable reserves

The satellite deposits would be used to supplement the Fort Knox mill feed, in effect displacing ore from the Fort Knox pit in favor of ore from the satellites and deferring processing of the Fort Knox ore until a later time. Combined, True North with its proven and probable reserve of 7.2 million tons, and Ryan Lode with its reserve of 2.4 million tons, would account for 0.6 years of impoundment capacity. This would leave approximately 31.4 million tons, or 2.1 years, of tailings capacity available for ore from such satellite deposits as True North Phases 2 and 3, Gil, Westridge/Steamboat, Amanita, and/or other deposits not yet identified.

It would be possible to increase the existing 210-ton capacity of the Fort Knox tailing impoundment by cycloning tailings to remove moisture and to compact the tailings more than occurs following direct deposition. In addition, the impoundment structure could be raised, or dry tailings could be stacked in the valleys above the impoundment. However, these last two options would be costly and are speculative at this time. Regardless, any such actions that would increase the facility's footprint would trigger another COE Section 404 permitting process with its attendant NEPA review requirement. That process likely would again address the regional mill concept and its cumulative impacts.

Thus, based on the remaining Fort Knox tailings impoundment capacity, the existing Fort Knox Mine ore reserves and mill processing capacity, the proposed development

of True North, and the potential development of the Ryan Lode and other known and/or unknown ore deposits discussed above, the Fort Knox Mill could operate approximately 2.7 years longer than if no satellite projects were to be developed (the remaining 10.9 year capacity of the tailings impoundment minus the 8.2 years Fort Knox could operate with just its existing reserves).

If the processing of ore from satellites were to commence with True North in early 2001, however, ore hauling to the Fort Knox Mill could extend for the entire remaining 10.9 years of tailings impoundment capacity. And, if Fort Knox ore reserves were adequate, and if the Fort Knox tailings impoundment capacity were to be enlarged following a new permitting and NEPA review process, a regional mill could operate for an additional indeterminate period of time assuming continuing discovery of economic satellite deposits. Such continuing discoveries, however, are highly speculative.

For the purposes of this cumulative impacts analysis, therefore, it is assumed that the Fort Knox Mill would operate for a minimum of 11 years as a regional mill, commencing in 2001, with the speculative possibility of an additional indeterminate period of operation.

If development of the True North project proved the concept of a regional mill to be economically successful, it likely would increase the probability that other satellite prospects would be similarly developed. Thus, development of the True North project could be the first step in a series of satellite projects that could produce cumulative impacts. These are discussed below.

Socioeconomic

In conjunction with other reasonably foreseeable future actions in the region, the project's cumulative impacts would have a greater effect on certain resources than others. If other small mine prospects in the Fairbanks area were developed (for example, the Ryan Lode project on Ester Dome), they would provide more mining-related jobs. Because the satellites likely would be developed sequentially, workers would be drawn largely from the existing FGMI work force with a relatively small number of new employees expected. Such foreseeable projects would be small in size and relatively short lived. The current socioeconomic conditions in the Fairbanks area show that Fairbanks could generally absorb such projects without significant effects (Mining Public Consent, 2000).

In addition to the direct economic benefits from an individual mine such as True North, overall lengthening of the life of the Fort Knox Mine based on a regional mill scenario would continue the mine's well documented significant economic benefits to Fairbanks and more generally to the state.